

# THE PUSH FACTORS OF INTRA-URBAN RESIDENTIAL MOBILITY IN CALABAR, NIGERIA

**Animashaun I. A.**

Department of Geography and Regional Planning

University of Calabar

Calabar, Nigeria

E-mail Address: bayoani@yahoo.com

## **Abstract**

The paper takes a critical look at the push factors of intra-urban residential mobility in Calabar. Push factors are defined as those which operate to induce or encourage households to change their residence in the city. The paper notes that changing of residence by urban households in Western cities is a common experience. But in cities of the developing countries, it is rare because of severe handicap imposed by limited stock of housing. Twelve push factors were identified as being very crucial in the analysis. They include dislike for housing occupied, dislike for type of people in the neighbourhood, family composition, eviction notice, house rent, etc. The objective of the paper was to establish the relative importance of these twelve factors and find their underlying dimensions. Data were extracted from a questionnaire survey of 874 random sample of urban households in Calabar, in which 471 households were seen to have moved at least, once. The data were subjected to Principal Component Analysis. Five components were extracted; force or eviction, neighbours, house-type, exterior appearance of dwelling, and family composition. The paper concludes that public agencies must take into consideration these maladies in the urban housing market.

**Key words:** Push, Residential, Mobility, Housing, Satisfaction

## **Introduction**

Intra-urban residential mobility has to do with movement of urban households from one housing to another. Such movements are propelled by certain factors called push and pull factors. These factors operate to either induce or encourage households to change their residence in the city. The particular set of factors being considered here are the push factors. The reason for this emphasis is because these push factors operate more forcefully than the pull factors in the study area.

Changing of residence of urban households in cities of the developed world is a common experience. Households move in search of residential satisfaction (Michelson, 1977). It was reported by Bourne (1981) that 80 per cent of Americans change their residence yearly while 30 per cent of Britons do same every year.

### **Problem of Study**

However in most cities of the developing world, it was reported that people hardly change their residence for as long as they live in the city (Animashaun, 2008). This contrast in residential behaviour is due in part, to differences in the housing market mechanisms in both the developed and the developing worlds. It was shown earlier that even if households in cities of the developing world had wanted to change their residence, they were seriously handicapped by limited stock of housing (Animashaun, 1981). It is, therefore, necessary to carry out a deep investigation of the forces behind this residential behaviour of urban households in cities of the developing world.

### **Objective of Study**

This paper sets out to discern the forces which either induce or prevent residential mobility in Calabar, Nigeria. Thereafter, the paper attempted to discover the underlying dimensions of these forces. Lastly, the paper tried to evaluate the relative significance of these underlying dimensions in urban residential mobility in Calabar, Nigeria. Calabar is chosen for this study because it is typical of modernizing cities in the developing world. The findings of this study can then be directly compared with what obtains in cities of the developed world.

The importance of this study stems from the fact that it pinpoints the parameters which need to be influenced in the urban housing market so as to achieve a desired level of residential satisfaction. In order to achieve the objectives stated above, it is hypothesized that the factors which induce intra-urban mobility have no discernible underlying dimensions, and cannot, therefore, be separated into composite variables.

### **The Study Area**

The population of Calabar has risen steeply from 99,352 in 1963 to 435,069 in 2006, the growth rate being 3.0 per cent per annum (National Population Commission, Calabar, 2006). This growth is consequent on increased commercial, industrial and service activities in Calabar. A bulk of the commercial activities in Southeast Nigeria is handled by Calabar. It is a Free Trade Zone, an international airport and a sea port.

The number as well as the size of industries in Calabar grew tremendously in the past few years. The variety of industries now operating in Calabar includes the following: food processing, cosmetics, metal works and sundry, cement manufacture, domestic appliances, sanitary materials and wood works. The service industry has grown so rapidly in the last 10 years because of government's emphasis on tourism. There are several banks of international repute, two universities, several tertiary institutions and secondary schools. All these activities have drawn people of all categories to Calabar, and they all need residential housing.

However, the existing stock of housing is grossly inadequate to meet the demand (Animashaun, 2008). Applying the method of Nwosu and Iwueze (2006), housing need was estimated by Animashaun (2008) as 67,000 units. But not only is this quantity not available, but serious efforts are not being made to meet the need, especially the low income housing. Furthermore, a significant proportion of available stock in the downtown area is old, poorly ventilated and huddled together in a most disorderly manner. Some of the houses are built with mud and wattle walls, and thatched roofs (Animashaun, 1992; 2007).

The constraints to rapid expansion of existing housing stock are many. The cost of building material is extremely high for the majority of people whose monthly income is below ₦10,000. (US \$=₦150.00). Furthermore, majority of the banks in the area are reluctant to

grant loans to applicants who may not be able to provide guarantors or collateral as security measures for such loans obtained.

Apart from the high cost of building materials, there are other physical constraints which force the cost of building up beyond limits affordable by the majority of the people. Land is itself, very costly to procure. A plot of land costs between ₦1,500,000.00 and ₦5,000,000.00 depending on its location and physical attributes. Steeply sloping or swampy and boggy parcels of land are relatively cheap to purchase. But then, the cost of developing the property pushes up the total cost of a building.

### **Conceptual Framework and Literature Review**

Urban housing supply exerts considerable influence on urban residential patterns. The fact is that choice of housing and its location must have to be made from the stock produced. The producer of housing acts almost independently of consumers' preferences, but on the basis of his estimation of the potential profit which is likely to accrue from his investment (Arimah, 1990). For this reason, the creators of residential mobility patterns in cities are not those demanding, but those supplying housing. By implication, therefore, housing allocation in the city is based on financial affordability (Sheffer, 1990).

Megbolugbe (1989) argues that housing is not just a game of numbers, but of ensuring that there exists a congruence between people on the one hand and their housing and its environment on the other. Given this premise, it is expedient to assume that people are rational in their actions, not only in the strict economic sense, but on a gross self-assessment or 'self-audit' of their own social, psychological, health and even, economic circumstances. This self-audit leads to 'self-selection' and those who fail to self-select on these bases become highly susceptible to problems in their housing and its environment.

Problems which arise from failure to self-select might warrant adapting or migrating from the residence. Therefore, the process of self-selection acts as a sorting procedure which brings about congruence between households and their housing environment. Of course, it is not every one that goes through the process of self-audit. Even if every one does, it is possible that other problems previously unforeseen during a particular period of decision-making emerge in a certain residential setting. This happens because what people do at any particular time reflects the extent to which the objective factors permit them and may not incorporate their behaviour at a future time when their circumstances could have changed (Simmons, 1968).

Simmons (1974) provided a list of the objective factors which might influence housing choice at some future time as follows:

- (1) to meet the need of newly formed families or families which arrive newly in cities;
- (2) the need for proximity to a person's new job, certain kinds of people or pastimes and amenities;
- (3) changes in family characteristics and stage in family's life which require changes in space and storage capacities of dwellings;
- (4) for status enhancement and in keeping up with the Joneses;
- (5) in reaction to social and environmental composition and quality of the neighbourhood; and
- (6) in reaction to housing tenure, especially in situations whereby renters might be motivated to move as soon as they build their own houses.

These objective factors of residential mobility could be collapsed into two distinct groups, viz. push and pull factors. Pull factors are the attractions which make people to select the particular new housing and/or its location instead of alternatives. Push factors are the repulsive factors which explain the reason why people move away from their housing and its location. Push factors are the ones which stress households beyond their limits of adaptation. Families experience stress and strain as a result of the dysfunctional aspects of their housing and its environment (Wolpert, 1966).

However, not all mismatches between homes and families result in migration. Families may go through experiences which are incongruent to their lifestyles or expectations and yet, may not feel the need to move. This experience is called stress. Family behaviour in this instance is rationalized on the fact that there is something positive in the gains in return for the negative consequences of the mismatched elements. It is also possible that stress may not necessarily result in residential mobility when families are constrained by traditional factors. One such factor is the desire to live close to one's own next of kin. Also, a family which lives in housing that is inherited from ancestral parents may be constrained to endure any stress in the housing so as to keep family artifacts such as objects of worship or graves of past heroes which may not be transferable to a new housing.

In contrast, strain is a condition which is thought impossible to bear on the long run, even if there are any benefits still being gained in the housing and its environment. Therefore, strain is the major precipitant of intra-urban residential mobility. Even then, Brown and Moore (1970) conceptualized a family in which exist recurrent strains and recurrent solutions. This is to say that the resolution of one set of strains does not preclude subsequent changes in the life and context of the family. These changes may create new stress and strain and call for a new set of resolutions.

One resolution might be to move again. Another option might be to change the nature of the existing residential environment. The family may build one additional room so as to increase the capacity of the housing. Older children may be asked to find their own accommodation. In other words, residential mobility is dynamic in nature, depicting families as engaging in an endless going round in response to specific but changing needs which are accommodated in a relatively superficial fashion, without really going anywhere. Because of this idea, Kemp (1989) concluded that the housing problem is never solved since it is a social construct rather than an objective reality.

Following this argument, Megbolugbe (1989) argued that the criteria behind the choice of current home may be fully satisfied and the criteria which suggest the need for a move may not create any current discomfort. Rather, it may be merely a signal that a move would be necessary in order to satisfy some progressively relevant criteria or hedonic reasons. In this situation, a move becomes a matter of action and not a reaction followed by an action.

The dynamics of stress-less or strain-less moving are explained by the hierarchy of human needs. A series of human needs come progressively into play as lower-order needs are satisfied. For example, man may first and foremost, look for safety and security in his housing (Aguda, 1994; Agbola, 2002). These are important needs for self-preservation. Thereafter, man seeks to satisfy self-esteem and self-actualization. However, these needs take extreme diverse forms from one culture to another and even within the same culture, from one group to another (Megbolugbe, 1991). For instance even at the micro-level behaviour, availability or

non-availability of user needs such as kitchen, bathroom, play spaces, and other institutional facilities would definitely provoke different reaction from one person to another.

In summary, the reasons for, and the pattern of moves are so complicated both at the micro and macro levels that they make it difficult for one to predict. This observation justifies the need for empirical verification in several cities, one of which is Calabar, Nigeria.

**Method of Study**

The data used in this analysis were generated from a more comprehensive questionnaire survey 874 random sample of urban households in which 471 of them were to have moved at least, once. (Animashaun, 2008). The questionnaire consisted of a section on the residential migration of households. Households were requested to provide a chronological list of addresses of houses where they had lived in Calabar. The systematic random sampling method was used to administer the questionnaire. Existing city streets were used as transects and respondents picked on both sides of each street. House numbers were used to identify the locations of the respondents. Along any given street, the respondent was picked with the aid of the table of random numbers. Subsequent selections were done at intervals of four houses, skipping three houses and picking the fourth until the entire street was covered. Whenever the selection fell on non-residential house, such as a church or vacant land, the next house was sampled. Also in a multiple family dwelling, only one household was sampled.

The twelve variables listed as important in influencing households' intra-urban residential mobility decision derived partly from the literature and partly from practical experience got from reconnaissance survey. These variables were called the push factors (Table 1). The push factors are those which bring about stress and strain on households in their past or present housing. Push factors, therefore, possess the capacity to compel households to seek alternative housing and/or location.

**Table 1: Variables Incorporated into the Analysis of Push Factors of Residential Choice**

S/N	Variable Description
1	Dislike for type of housing occupied
2	Dislike for type of housing tenure
3	Dislike for type of people in the neighbourhood
4	Dislike for exterior of dwelling
5	Insufficient space
6	Noise and similar intrusions from outside the house
7	Difficulty of access to work-and/or market place
8	Family composition
9	Eviction notice
10	Interior size/layout
11	Build own house
12	High house rent

**Source:** Author's fieldwork, 2008

Information on this set of variables was collected from households who had moved at least, once from their residences. The household head was made to rank each set of variables

separately according to the significance of the variables in influencing the household's decision to move. Household heads were advised to do the ranking of the variables in ascending order of magnitude. This is to say that in the set of push factors consisting of twelve variables, the most influential variable was ranked twelve while the least influential variable was ranked one.

### **Technique of Data Analysis**

The most suitable technique for analyzing the problem posited above is Factor Analysis (FA). Apart from the traditional role of data reduction which popularizes factor analysis, it is also an exploratory device. This is to say that the technique has the capability of assisting in the search for simple and interpretable factors. In this case, the option adopted is the R-mode factor analysis which is based on correlations between the selected variables.

But because FA requires that inferential assumptions are made about the structuring of variables and their sources of variation, principal component analysis (PCA) is the suitable version. PCA is simpler and more straightforward than FA because it does not require particular assumptions about the underlying structure of the variables. Rather, it seeks to identify the particular combination of variables which accounts for more of the variance in the data as a whole than any other linear combination. The method of extraction is such that one component is independent (orthogonal) of the other.

### **The Push Factors**

As explained earlier, push factors are the precipitants of intra-urban residential mobility in that they are responsible for the stresses and strains which urban households experience in their present housing. When the twelve push factors in Table 1 were subjected to scrutiny, it was discovered that they did not autocorrelate (Table 2), that is to say that the variables each spoke a different language, one from others. In the same vein, eleven of the twelve variables had high communalities, ranging between 0.505 and 0.814, implying that eleven of the variables are significantly relevant to the analysis. (Table 3)

Table 4 depicts the eigenvalues and the variances explained by the components. Five components were extracted. When rotated, the first component extracted explained 14.16 per cent of total variance while the fifth component explained 10.60 per cent of total variance. In all, the five components extracted accounted for 61.75 per cent of the total variance. The rotated component matrix (Table 5) indicates the dimension of each component. Component one loads very positively high on eviction notice and very negatively high on insufficient space in the housing. This is to say that people are forced, in most instances, to move out of their residence. In other words, voluntary moves are not very common. Urban household may not be expected to move out of their residence even if the housing space fails to adequately accommodate them. The reluctance of households to move even in the event of eviction notice is predicated on the fact that there is limited stock of housing (or none at all) into which such households could move.

Component two loaded significantly positive on dislike for the type of neighbours. There is an increasing level of consciousness among urban residents of who their neighbours are and what they might be doing. The fear of insecurity has compelled many people in the city to be particularly selective of the neighbourhood in which to live (Agbola, 2002). Today in Calabar, the menace of armed robbery, kidnapping, rape, murder, the snatching of cellular phone hand-sets and handbags, pick-pocketing and other similar social vices has compelled

people to have interest in keeping an eye on their neighbours' businesses. Whenever it is discovered that some neighbours engage in shady business, households may take decisions to move out of the residential neighbourhood and seek alternative housing accommodation in a relatively more peaceful and more secure environment.

Component three loads positively high on dislike for type of houses. The problem of type of house might be with the architecture or more realistically, with the user amenities in the housing. If households tolerate living in houses with poor kitchen, toilet and bathing facilities, or with poor roof, no ceiling and similar defects in the housing, it is only for some time. They are likely going to seize the opportunity of a vacancy as soon as it is available, to move to a better house. Reference has been made earlier to the inferiority of some of the dwellings in Calabar. However, new houses even though few, are being built from time to time. As the upper class people or the owners move into them, the vacancies thus created filter down to households lying in wait for such an opportunity.

**Table 2: Correlation matrix of push factors of intra-urban residential mobility in Calabar**

S/N	Variable	Var00001	Var00002	Var00003	Var00004	Var00005	Var00006	Var00007	Var00008	Var00009	Var00010	Var00011	Var00012
1	Dislike for housing occupied	1.000	.206	.081	.126	-.250	-.161	-.245	-.148	-.175	-.094	-.361	.087
2	Dislike for type of housing tenure	.206	1.000	.172	.029	-.189	-.178	-.115	-.238	-.147	-.246	-.216	.168
3	Dislike for type of people in the neighbourhood	.081	1.72	1.000	.149	-.110	-.050	-.273	-.161	-.116	-.278	-.327	.138
4	Dislike for exterior of dwelling	.126	.029	.149	1.000	-.042	.104	-.240	-.225	-.251	-.215	-.219	.085
5	Insufficient space	.250	-.189	-.110	-.042	1.000	.090	.110	-.091	-.394	-.154	-.109	-.119
6	Noise and similar intrusion from outside the house	-.161	-.178	-.050	.104	-.090	1.000	-.081	-.041	-.227	-.202	-.111	-.080
7	Difficulty of access to work- and/or market place	-.245	-.115	-.273	-.240	.110	-.081	1.000	-.022	-.097	.041	.000	-.152
8	Family composition	-.148	-.238	-.161	-.225	-.091	.141	-.022	1.000	-.093	-.021	-.044	-.026
9	Eviction notice	-.175	-.147	-.116	-.251	-.394	.227	.097	.093	1.000	.229	.886	.061
10	Interior size/layout	-.094	-.246	-.278	-.215	-.154	-.202	.041	-.021	.229	1.000	.145	-.013
11	Build own house	-.361	-.216	-.327	-.219	-.109	-.111	.000	-.044	.086	.145	1.000	-.129
12	High house rent	.087	.168	.138	.085	-.119	-.080	-.152	-.026	.061	-.013	-.129	1.000

**Source:** Author's fieldwork, 2008

**Table 3: Communalities of Push Factors of Intra-Urban Residential Mobility in Calabar**

S/N	Initial	Extraction
1	1.000	.814
2	1.000	.675
3	1.000	.574
4	1.000	.505
5	1.000	.681
6	1.000	.558
7	1.000	.652
8	1.000	.803
9	1.000	.651
10	1.000	.578
11	1.000	.552
12	1.000	.368

Source: Author's fieldwork, 2008

**Table 4: Eigenvalues and Total Variance Explained by Push Factors of Residential Mobility in Calabar**

Component	Extraction sums of square loadings			Rotation sum of squared loadings		
	Total	% of variance	Cumulative %	Total	% of variance	Cumulative %
1	2.353	19.910	19.610	1.699	14.160	14.160
2	1.741	14.510	34.120	1.585	13.206	27.367
3	1.191	9.923	44.043	1.451	12.095	39.462
4	1.108	9.231	53.274	1.403	11.689	51.150
5	1.017	8.471	61.745	1.271	10.595	61.745

Source: Author's fieldwork, 2008

**Table 5: Rotated Component Matrix of Residential Mobility Push Factors in Calabar**

Variables	Component				
	1	2	3	4	5
Dislike for type of housing occupied	2.898E-02	-3.560-02	.855	.248	-.136
Dislike for type of housing tenure	6.700E-02	.492	.385	-.244	-.470
Dislike for type of people in the neighbourhood	5.372E-02	.718	4.758E-02	.225	-5.621E-02
Dislike for exterior of dwelling	-.192	.132	.101	.618	-.2411
Insufficient space	-.749	-2.435E-02	-.125	-.167	.276
Noise and similar intrusions from outside the house	-.405	5.246E-03	-.443	.421	-.1411
Difficulty of access to work-and/or market place	-.184	-.169	-.141	-.745	-.122
Family composition	-2.793E-03	1.221E-03	2.170E-02	-.118	.888
Eviction notice	.727	-3.756E-02	-.206	-.221	.171
Interior size/layout	.420	-.624	6.485E-02	-22.051E-02	8.625E-02
Build own house	.264	-.417	-.526	-7.734E-02	-.161s
High house rent	.347	.4644	6.133E-022	.1143	9.442E-02

**Source:** Author's fieldwork, 2008

Component four loads high on the exterior of dwelling. The exterior of dwelling involves the housing environment as well as the aesthetic condition of the house itself. Some of the houses are not decent to look at and their environments are also filthy. Households which are unlucky to reside in such an environment may endure only up to the point where they could see an alternative housing.

Finally, component five loads very high on family composition. In other words, dynamic social changes in the family such as changes in family size, marital status, age, health and the like can cause families to change their housing. Single households certainly need less housing space than couples with children. The ages of children are also to be considered in housing choice. Households with infants require residential housing with facilities which are conducive for bringing up children. As the children grow up, the household's housing need changes. Aged households whose children have all moved out to form their own families also require less housing space. However, these periodic adjustments of housing need to correspond with family composition are predicated on financial affordability. The significance of these variables as push factors of intra-urban residential mobility is confirmed by their component score coefficient matrix.

In the fore-going analysis it would be seen that the following variables are dormant or fail to play significant roles as push factors: dislike for the type of house, tenure, noise and similar intrusions from outside the house, interior size or layout of the house, house ownership and high house rent.

To begin with, most households are tenants and tenancy agreements seem not to vary from one neighbourhood to another. Also, the consciousness of the dangerous effect of noise and other similar intrusions is still very poor among the majority of residents of Calabar metropolitan area. Noise pollution seems to be the normal thing while quietness is

exceptional. Common sources of noise include electronic media such as television, radio, and musical instruments played inside the house or within the neighbourhood. Households sometimes seem to be in hot competition as to whose musical set is the most powerful, the power being measured by the amount of noise it can make. Other sources of noise are the residential premises, churches and mosques. All these sources together produce noise unabated from one residential neighbourhood to another.

In most cases, the design and finishing of most residential houses especially the low income types, are invariant from one residential neighbourhood to another since professional builders with similar experience and without initiatives dominate the house building industry. House rent also seems standardized and varies according to house types. Therefore, these factors are really not sufficiently discriminatory from one residential neighbourhood to another. Hence, they do not form vital dimensions on which people act to seek alternative housing.

### **Summary of Findings**

This study observed that the relative immobility of households in Calabar is largely attributed to inadequate supply of residential housing. Landlords seem to take advantage of their awareness of housing shortage to issue threats of eviction to their tenants. This behaviour is contrary to what takes place in urbanized Europe and America where residential movements are largely voluntary. Other dimensions on which residential mobility components loaded significantly are as follows: dislike for the type of neighbours, dislike for the type of house, dislike for exterior of dwelling and family composition.

### **Conclusion**

Inferences drawn from this empirical study have certainly improved our knowledge on intra-urban residential mobility. There is, therefore, no doubt as to the immensity of the contribution of the study to theory development in this area of urban studies. Furthermore, public agencies in charge of urban housing are better informed of the maladies in the urban housing market.

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